

## **DETAILED ACTION**

### ***Continued Examination under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 10, 2010 has been entered.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) filed on 3/31/2011 and 5/18/2011 has been considered.

### ***Response to Amendment***

3. This action is response to the Amendment filed on May 10, 2010.
4. Claims 64, 71-75 have been amended. Claims 64-83 are currently pending.
5. Applicant's arguments with respect to claims 64-83 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States

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before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 64-83 are rejected under 35 U.S.C. 102(e) as being anticipated by Alriksson et al. (US PAT 6,977,938 B2).

Regarding claim 64, Alriksson discloses "A gateway ( G and G2 –Figure 4) for forwarding transmission information between a first terminal node (FA –figure 6) of a first network and a second terminal node( IWU –Figure 6) of (Col. 8: 20-26 which recites an ad hoc network ( a second terminal node), ad hoc network Mobile IP foreign agents are used as Internet gateways ( A gateway) between an ad hoc network and the Internet ( first network)) wherein the first terminal node is addressable by a global source address ( internet access with Home address) and a second terminal node is addressable by an ad hoc destination address (Col. 8:35-40, which recite ad hoc network by looking at the IP address), the gateway comprising":

"A transmission/reception unit (Col. 9:32-42 which recites the node acting as a gateway when receiving a route request) adapted to receive transmission information from said first terminal node and to transmit said transmission information to said second terminal node (Col. 9:33-42 which recite forward the (first terminal node) request, in case where the destination is connected behind the gateway, i.e. in the ad hoc network) (second terminal node);

“an acknowledgment (Col. 9:37-43 which recite RESPONSE, from the destination (second terminal node), send a proxy route reply) information detection unit (Col. 9:44-52 which recite a node detect see the flowchart of FIG. 2 in which the steps executed in the route discovering procedure (detection)) adapted to detect the receipt of acknowledgment information from said second terminal node acknowledging that said second terminal station has received said transmission information;

“Wherein said transmission/reception unit comprises a first tunnel setup unit (Col. 10:43-58 which recite tunnel setup by tunnel the packet to the Internet gateway) for setting up a first tunnel link between said gateway and said second terminal node by encapsulating a transmission packet ( Col. 10:43-58, Which recites the tunneling can be accomplished by either encapsulation or source routing of transmission packet) received from said first terminal node and having a global source address of said first terminal node and a global destination address of said second terminal node into a modified transmission packet ( Col. 12: 1-4 which recite modifications must be made to the communication between the foreign agent and the visiting node) having an ad hoc source address ( Col.12:15-25 which recite modify the address of said gateway by using this host route packets are directed to a virtual interface in which they are encapsulated with the foreign agent as the destination IP address, and sent back using the IP to be routed to the foreign agent) and an ad hoc destination address of said second terminal node, wherein said transmission/reception unit transmits said transmission information and receives said acknowledgment information to and from said second terminal node respectively through said first tunnel link ( Col. 12:30-32, which recites traffic that will

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leave the ad hoc network is traffic that is tunneled to the foreign agent from a registered node) .

Regarding claims 65 and 76, Alriksson discloses “characterized by an accounting unit (Col. 13, which recites act as an accounting unit unless is acknowledged from ad HOC node) otherwise, this is a costly operation. As an alternative, instead of periodically broadcasting agent advertisements they can be unicast to register nodes only. If only a small fraction of the nodes in the ad hoc network are visiting nodes, this will ensure less traffic in the ad hoc network) adapted to determine charging information for the transmission of said transmission information to said second terminal node if said acknowledgment information detection unit detects the receipt of acknowledgment information for the transmission of said transmission information to said second terminal station”.

Regarding claims 66 and 77, Alriksson discloses “characterized by transmission information characteristics determining unit adapted to determine transmission characteristics of the transmission of said transmission information to said second terminal node” (Col. 9:1018 which recite the transmission information distributing routing information from the fixed Internet into the ad hoc network is to let the Internet gateways use proxy route replies and added semantics and proxy replies is hereinafter referred to as proxying ( adapted to), which would allow any gateway to participate in the route discovery process)wherein detect the second network( Ad HOC node).

Regarding claims 67 and 78, Alriksson discloses “characterized in that said transmission information characteristics determining unit is adapted to determine as

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said transmission characteristics one or more selected from the group consisting of a data amount, a transmission speed ( Col. 9 :10-15 which recite data flow information enable gateways equally supporting data flow from an ad hoc network to the Internet to be utilized) , a transmission route (Col. 8:30-35, which recite transmission route information that default routes and network routes are incorporated into routing in a Mobile Ad Hoc Network) along which said transmission information has been transmitted to said second terminal node, and a delay time ( Col. 13: 31-38 which recite delay time to prevent several visiting nodes from broadcasting agent solicitations, they have to wait for a certain amount of time ( delay time)before they are allowed to transmit) of the packet transmission.

Regarding claims 68 ,72 and 81 , Alriksson discloses “characterized in that said second ad hoc network (Col. 7: 20-24, which recite AD hoc packet switch network as illustrated in FIG. 1c, ) is a packet switched network (Col. 8:41-45 which recite packet switch network that the foreign agent can then deliver the packets to the node in the ad hoc network), said transmission information comprises one or more transmission packets, and said acknowledgement information (Col. 9: 45-60, which recite acknowledgement information that a node and also for intermediate nodes to receive a normal route reply ( acknowledgement) and potentially many proxy route replies, one from each gateway connected in the ad hoc network) comprises one or more acknowledgment packets”.

Regarding claims 69 and 79,Alriksson discloses “characterized by an acknowledgment request unit adapted to transmit to said second terminal node an

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acknowledgment request packet including a predetermined sequence number of a transmission packet which was transmitted but for which no acknowledgement information has as yet been detected ( Col.9: 61-67 which recite no acknowledgement was received where it is determined in the block 220 that the stored route is not a proxy route it is determined in a block 240 whether the route reply is a proxy reply) by said acknowledgment information detection unit, said acknowledgment request message requesting from said second terminal node the transmission of an acknowledgment packet acknowledging the receipt of the transmission packet having said predetermined sequence number” ( Col.9: 60-67 which recites that it is determined in a block 230 whether the route reply sequence number is more recent than the stored route).

Regarding claim 70, Alriksson discloses “characterized by a route check unit (Col.9:10-18 which recite detect unit that gateway to participate in the route discovery process) adapted to detect whether a transmission route (Col.9: 10-18 which recite gateways equally supporting data flow from an ad hoc network to the Internet to be utilized ) to said second terminal node exists”.

Regarding claims 71,74-75 and 80, Alriksson discloses( Col. 10:24-29 which recites in the ad hoc network, two of which involve a gateway GW1, GW2 of an ad hoc network) “A first terminal node (B or A node –Figure 3) for exchanging transmission information with a second terminal node ( E-Figure 3)of another network connected to said ad hoc network through a gateway, wherein the first terminal node is addressable by an ad hoc destination address (Nod B ad hoc address192.36.157.71 –Figure 4) and the second terminal node is addressable by a global resource address ( Col. 11: 42-53,

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which recite for ad hoc second node to be reachable that the Mobile IP with foreign agent care-of addresses can then be used in the gateway and when registered with a foreign agent, a visiting node is routable by its home address( global resource address ), the first terminal node comprising”:

“a transmission/reception unit adapted to receive transmission information from said another terminal node through said gateway” (Col. 11: 42-54 which recite receive transmission information from ad hoc network is connected to the Internet there is at least one node that resides on the border between the ad hoc network and the rest of the Internet, this node being an Internet gateway).;

“an acknowledgment information transmission unit adapted to transmit to said gateway acknowledgment information acknowledging ( Col. 11: 28-31 which recites the first gateway G sends a proxy route reply ( acknowledgement)back to the node A announcing the route R2.) that said transmission/reception unit has received said transmission information”;

“wherein said transmission/reception unit comprise a first tunnel setup unit(Col. 10:43-58 which recite tunnel setup by tunnel the packet to the Internet gateway) for setting up a first tunnel link between said second terminal node and said gateway by encapsulating a transmission packet ( Col. 10:43-58, Which recites the tunneling can be accomplished by either encapsulation or source routing of transmission packet) received from said first terminal node and having a global source address of said first terminal node and a global destination address of said second terminal node into a modified transmission packet ( Col. 12: 1-4 which recite modifications must be made to

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the communication between the foreign agent and the visiting node) having an ad hoc source address( Col.12:15-25 which recite modify the address of said gateway by using this host route packets are directed to a virtual interface in which they are encapsulated with the foreign agent as the destination IP address, and sent back using the IP to be routed to the foreign agent) of said gateway and an ad hoc destination address of said second terminal node, wherein said transmission/reception unit receives said transmission information and transmits said acknowledgment information from and to said gateway respectively through said first tunnel link” ( Col. 12:30-32, which recites traffic that will leave the ad hoc network is traffic that is tunneled to the foreign agent from a registered node) .

Regarding claim 73, Alriksson discloses “characterized by a packet retransmission request unit adapted to transmit to said gateway a retransmission request packet including a sequence number (Col. 10:5-8 which recites where it is determined in the block 230 that the route reply sequence is not more recent it is determined in a block 250 whether the route reply sequence number is equivalent to the stored route) of a transmission packet which is requested to be retransmitted from said gateway” ( Col. 9: 54-67- Col. 10- 18. Which recite the process in figure 2, the condition for retransmission or discard block 260 or accept the route reply block 280)

Claim 74, first terminal node is addressable by a global source address and second terminal node is addressable by an ad hoc destination address. Claim 71 first terminal node is addressable by an ad hoc destination address and second terminal



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node is addressable by a global source address. Communicated between First and second terminal node have similar limitation

Claim 71 has same limitation as claim 74 and 75 with first and second terminal node with reversed address and similar communicating process between terminal nodes. Therefore method claim 74 is rejected for the same reasons as used claim 71.

Method claim 75 is drawn to the method of using the method claimed in claims 74. Therefore method claim 75 is rejected for the same reasons of as used above.

Regarding claims 82 and 83, Alriksson discloses “a computer program product stored on a computer-readable medium, comprising code sections for respectively carrying out the functions of the gateway in accordance with claim 74”. (Col. 20: 36-39 which recite the invention comprises a computer program product directly loadable into internal memory ( CRM) of a digital computer, comprising software code portions for performing steps of claim 74 and 75 when the product is run on a computer

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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